## CHAPTER 64-EXCELLENCE IN MATHEMATICS, SCIENCE, AND ENGINEERING EDUCATION

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# SUBCHAPTER I—FINDINGS AND OBJECTIVES

## § 5301. Findings and objectives

# (a) Findings

The Congress finds that-

- (1) science and mathematics are cornerstones of America's efforts to compete in the global marketplace and improve our standard of living and quality of life;
- (2) international comparisons show American students are consistently behind their foreign counterparts in mathematics and science achievement;
- (3) projections by the National Science Foundation estimate a shortage of 675,000 scientists and engineers by the year 2000;
- (4) women and minorities are significantly underrepresented in the fields of mathematics, science and engineering;
- (5) the achievement of universal scientific and mathematical literacy by all Americans is an essential goal of all efforts to strengthen American competitiveness;
- (6) the achievement of scientific and mathematical literacy requires a strong, coordinated effort to strengthen the teaching of science and mathematics; and
- (7) the Federai Government has a significant role in promoting the study of mathematics and science, by providing financial assistance to improve the general quality of programs for the study of mathematics and science, by acting as a source for information concerning successful projects and activities, by encouraging talented men and women to pursue scientific careers and by strengthening the mathematics and science educational opportunities available to women and minorities.

## (b) National objectives

The Congress declares that it shall be a national objective to—

(1) encourage American students to pursue careers in mathematics, science and engineering:

- (2) improve the quality of teaching in mathematics and science made available to all Americans:
- (3) have American students rank first in the world in mathematics and science:
- (4) substantially increase the number of graduates with degrees in mathematics, science and engineering; and
- (5) substantially increase the number of women and minorities pursuing careers in mathematics, science and engineering.

(Pub. L. 101-589, title I, § 101, Nov. 16, 1990, 104 Stat. 2882.)

#### EFFECTIVE DATE

Section 731 of Pub. L. 101-589 provided that: "The provisions of this Act [see Short Title note below] shail take effect on October 1, 1990, or the date of enactment of this Act [Nov. 16, 1990], whichever is later."

#### SHORT TITLE

Section 1 of Pub. L. 101-589 provided that: "This Act lenacting this chapter and sections 2994 to 2994g of this title, redesignating section 2993 of this title as section 2996 of this title, amending sections 237, 240, 1201a, 1221e-1, 2983 to 2992, and 4512 of this title and sections 1869 and 1873 of Title 42, the Public Health and Welfare, and enacting provisions set out as notes under this section and sections 240 and 2982 of this title1 may be cited as the 'Excelience in Mathematics, Science and Engineering Education Act of 1990'."

SUBCHAPTER II—MATHEMATICS, SCI-ENCE AND TECHNOLOGY IMPROVE-MENTS

## PART A-INNOVATIVE TECHNOLOGIES

#### CODIFICATION

This part was, in the original, designated part B and has been redesignated part A for purposes of codification.

§ 5311. Expanding the uses of innovative technologies for mathematics and science instruction

## (a) Computer technologies

## (1) Program authorized

The Director shall establish research programs on the use of computers and related technologies in basic mathematics, science, and technology instruction.

## (2) Eligible applicants

In carrying out the program under this subsection, the Director shall establish a merit review process to make awards on the basis of—

- (A) the potential of the proposal to improve the effectiveness and productivity of basic mathematics and science education;
- (B) the potential of the proposal to involve the classroom teacher in the design of the program and to provide teacher training for optimum effectiveness in the classroom; and
- (C) the capability of the entity developing the innovative computer technology to provide broad and efficient dissemination of the technology to schools.

#### (3) Use of awards

Funds awarded under this subsection may be used for—

(A) research and development of curriculum:

(B) development of computer software; and

(C) research and development of other promising technologies for educational applications as specified by the Director.

## (h) Distance learning

## (1) Program authorized

The Director shall establish programs to promote the use of interactive telecommunications linkages to provide mathematics and science education in the elementary and secondary classroom.

## (2) Eligible applicants

In carrying out the program under this subsection, the Director shall establish a merit review process to make awards to partnerships which may involve State educational agencies, local educational agencies, public television agencies, institutions of higher education, and other relevant entities, on the basis of—

(A) the potential of the proposal to improve the delivery of quality mathematics and science instruction to underserved rural and urban areas; and

(B) the potential of the proposal to provide teacher training programs for optimum

effectiveness in the classroom.

## (3) Use of awards

Funds awarded under this subsection may be used for—

(A) the research and development of software and hardware technologies necessary to implement interstate and intrastate interactive linkages with several school districts:

(B) research on two-way audio and video interactive telecommunications and computer linkages designed to be used in conjunction with each other;

(C) research and development of curriculum;

(D) teacher training in the use of technologies developed under this section; and

(E) other appropriate telecommunications research projects that will improve mathematics and science education in underserved areas.

# (c) Special rule

In carrying out the provisions of this section, the Director shall—

(1) pay particular attention to the needs of rural and urban areas which are underserved in fields of mathematics and science instruction or which have a high percentage of students receiving services under chapter 1 of title I of the Elementary and Secondary Education Act of 1965 [20 U.S.C. 2701 et seq.];

(2) give special consideration to proposals to extend or adapt for wider applications technologies, and associated educational materials, that the eligible applicant making the proposal has demonstrated to be effective in limited applications;

(3) ensure coordination between the National Science Foundation's programs for support of teacher training and programs developed under this section, with the objective of training teachers in the use of promising educational technologies; and

(4) consult, cooperate and coordinate with analogous programs and policies of other Federal agencies.

## (d) Matching requirement

Awards shall be made under this section only to eligible applicants that will contribute resources, in cash or in kind, from non-Federal sources in an amount equal to 25 percent of the Federal award.

## (e) Coordination

The Director shall work with the Secretary to encourage use of technologies and educational materials developed under this section in Department of Education model programs established under section 2012 of the Dwight D. Eisenhower Mathematics and Science Education Act [20 U.S.C. 2992] for instruction and training in the use of computers. In addition, the Director shall ensure that programs and activities developed under this section are reported to the Clearinghouse established under section 2012 of such Act for subsequent dissemination through the regional consortia established under subpart 2 of such Act [20 U.S.C. 2994 et seq.].

# (f) Planning activities

The Office of Science and Technology Policy shall ensure that planning activities for education and human resource development and for high performance computing within the Federal Coordinating Council for Science, Engineering, and Technology include consideration of the use of national computer networks for educational purposes, including distance learning and dissemination of curricular materials.

(Pub. L. 101-589, title II, § 221, Nov. 16, 1990, 104 Stat. 2891.)

## REFERENCES IN TEXT

The Elementary and Secondary Education Act of 1965, referred to in subsec. (c)(1), is Pub. L. 89-10, Apr. 11, 1965, 79 Stat. 27, as amended generally by Pub. L. 100-297, Apr. 28, 1988, 102 Stat. 140. Chapter 1 of title I of the Act is classified generally to division 1 (§ 2701 et seq.) of subchapter I of chapter 47 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 2701 of this title and Tables.

The Dwight D. Eisenhower Mathematics and Science Education Act, referred to in subsec. (e), is part A of title II of Pub. L. 89-10, as added Pub. L. 100-297, title I, § 1001, Apr. 28, 1988, 102 Stat. 219, as amended. Subpart 2 of the Act is classified generally to subpart 2 (§ 2994 et seq.) of part A of subchapter II of chapter 47 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 2981 of this title and Tables.

## SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 5431 of this title.

## PART B-SCIENCE-TECHNOLOGY CENTERS

#### CODIFICATION

This part was, in the original, designated part C and has been redesignated part B for purposes of codification.

#### § 5321. Science-technology centers

#### (a) In general

#### (1) Awards authorized

The Director is authorized to make awards to science-technology centers for—

(A) development of more effective, handson, interactive mathematics, science and technology programs and activities;

(B) replication or dissemination of effective programs and activities, giving special attention to the needs of female and minority children and economically disadvantaged areas; and

(C) development of new science-technology centers, including support for such centers to work with established science-technology centers to acquire proven educational programs.

#### (2) Award basis

Funds awarded pursuant to this section shall be awarded on a competitive, merit review basis.

#### (3) Criteria

Criteria for making awards under paragraph (1) may include—

(A) the potential for the educational program to have a significant impact on both formal and informal science education;

(B) the capability of the recipient institution to disseminate the material broadly;

(C) the extent of matching funds provided ed from non-Federal sources;

(D) the experience and qualifications of the staff of the recipient institution; and

(E) the overall excellence of the proposed program.

### (b) Special consideration

In making awards pursuant to this section the Director shall give special consideration to programs designed primarily for elementary school-aged children.

# (c) Geographic distribution

In making awards pursuant to this section, the Director shall, to the extent practicable, ensure an equitable geographic distribution of such awards.

# (d) Use of Clearinghouse

The Director shall report on such programs and activities developed under this section to the Clearinghouse established under section 2012 of the Dwight D. Eisenhower Mathematics and Science Education Act [20 U.S.C. 2992] for subsequent dissemination through the regional consortia established under subpart 2 of such Act [20 U.S.C. 2994 et seq.].

## (e) Authorized activities

Awards made under this section may be used for—

(1) scientific or technological exhibits developed for public display, either in a science-

technology center or sponsored by a sciencetechnology center but displayed in another facility;

(2) educational activities, such as curriculum development, teacher training programs, and student educational kits, developed for use by teachers for students; and

(3) other formal or informal science educational programs developed by science-technology centers.

#### (f) Definitions

As used in this section-

- (1) the term "informal science education" means those aspects of science education that occur outside the school classroom, usually voluntary, recreational, and interdisciplinary in nature, that are not directed by a specific curriculum;
- (2) the term "science" means all physical, biological, and social sciences, mathematics, and engineering; and
- (3) the term "science-technology center", which may include museums, planetariums, libraries and zoos, means a nonprofit institution open to the general public providing interactive exhibits, demonstrations, and informal science education designed to—
  - (A) further public understanding of science and technology; and
  - (B) illustrate how such science and technology interacts with society.

Such institutions may also be involved in formal educational activities.

(Pub. L. 101-589, title II, § 231, Nov. 16, 1990, 104 Stat. 2892.)

## REFERENCES IN TEXT

The Dwight D. Eisenhower Mathematics and Science Education Act, referred to in subsec. (d), is part A of title II of Pub. L. 89-10, as added Pub. L. 100-297, title I, § 1001, Apr. 28, 1988, 102 Stat. 219, as amended. Subpart 2 of the Act is classified generally to subpart 2 (§ 2994 et seq.) of part A of subchapter II of chapter 47 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 2981 of this title and Tables.

## SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 5431 of this title.

PART C-GRANTS TO EDUCATIONAL AGENCIES FOR SYSTEMIC REFORM OF MATHEMATICS AND SCI-ENCE EDUCATION

#### CODIFICATION

This part was, in the original, designated part D and has been redesignated part C for purposes of codification

## § 5331. Systemic reform of mathematics and science

## (a) In general

The Director, in consultation with the Secretary, is authorized to make awards to States or State educational agencies for projects that implement system-wide improvement in elementary or secondary school mathematics and science education.

## (b) Improvement components

Each project for which an award is made pursuant to subsection (a) of this section shall include the following components:

- (1) increased student achievement in mathematics and science;
- (2) improvements in organizational structure and decisionmaking;
- (3) modifications in the provision and allocation of resources regarding mathematics and science instruction:
- (4) improvement in the recruitment, retention and continuing professional development of teachers and other educators who instruct mathematics and science:

(5) improved mathematics and science curriculum content and learning goals; and

(6) use of other Federal funds including funds provided for the Dwight D. Eisenhower Mathematics and Science Education Act [20 U.S.C. 2981 et seq.].

#### (c) Special rule

In making awards pursuant to subsection (a) of this section, the Director shall—

- (1) to the extent practicable, ensure an equitable geographic distribution of such awards; and
- (2) give priority to States or State educational agencies whose improvement plans place a strong emphasis on increasing the academic achievement of females and minority students in mathematics and science.

(Pub. L. 101-589, title II, § 241, Nov. 16, 1990, 104 Stat. 2894.)

# REFERENCES IN TEXT

The Dwight D. Eisenhower Mathematics and Science Education Act, referred to in subsec. (b)(6), is part A of title II of Pub. L. 89-10, as added Pub. L. 100-297, title I, § 1001, Apr. 28, 1988, 102 Stat. 219, as amended, which is classified generally to part A (§ 2981 et seq.) of subchapter II of chapter 47 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 2981 of this title and Tables.

# SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 5431 of this title.

## SUBCHAPTER III—HIGHER EDUCATION

PART A—GRADUATE FELLOWSHIPS AND TRAINEESHIPS

## § 5341. Statement of purpose

It is the purpose of this part to avert the substantial shortage of American scientists and engineers projected to occur over the next 15 years by significantly increasing the number of graduate fellowships awarded by the National Science Foundation and to institute a program of graduate traineeships.

(Pub. L. 101-589, title III, § 301, Nov. 16, 1990, 104 Stat. 2895.)

# § 5342. Graduate fellowships

## (a) In general

The Director is authorized to increase the number of graduate fellowships awarded by the

Foundation, so that, in fiscal year 1993 and each fiscal year thereafter, at least 1,200 fellowships are awarded annually.

## (b) Special rule

In awarding fellowships pursuant to subsection (a) of this section, the Director shall ensure that a substantially increasing number of fellowships shall be awarded to women and minorities in fiscal year 1991 and in each succeeding fiscal year through fiscal year 2000.

## (c) Omitted

(Pub. L. 101-589, title III, § 302, Nov. 16, 1990, 104 Stat. 2895.)

#### CODIFICATION

Section is comprised of section 302 of Pub. L. 101-589. Subsec. (c) of section 302 of Pub. L. 101-589 amended section 1869 of Title 42, The Public Health and Welfare.

## SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 5431 of this title.

## § 5343. Graduate traineeships

#### (a) In general

The Director is authorized to carry out a competitive, merit-based program of making awards to institutions of higher education to enable such institutions to conduct traineeship programs which encourage promising students, especially women and minorities, to continue their education and research in mathematics, science and engineering.

#### (b) Special rule

In making awards pursuant to subsection (a) of this section, the Director shall, to the extent practicable, ensure—

- (1) an equitable geographic distribution of such grants;
- (2) that institutions of higher education receiving such awards demonstrate experience in, and a commitment to, educating and graduating a significant number of women and minority students in mathematics, science and engineering; and
- (3) that special consideration is given to institutions of higher education that have demonstrated progress and an ongoing commitment to upgrading their capabilities to perform high quality research, and are not among the institutions currently receiving a large number of students with National Science Foundation graduate fellowships.

(Pub. L. 101-589, title III, § 303, Nov. 16, 1990, 104 Stat. 2896.)

# SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 5431 of this title.

## PART B-CENTERS OF EXCELLENCE

## § 5351. Centers of Excellence for Undergraduate Teaching

#### (a) Establishment

The Director shall establish a program of making awards to encourage institutions of higher education to improve, and to give greater attention to, undergraduate instruction in science, mathematics and engineering. Awards under this section shall be made on a competitive, merit review basis to faculty with a record of excellence in teaching using the criteria described in subsection (c) of this section. Awards under this section shall be for a 3-year period, and the amount of each award shall be comparable to those under the Presidential Young Investigator program.

## (b) Use of funds

Awards made under this section shall be used to improve the quality of undergraduate instruction at the recipient institution. Awards made under this section may be used for such purposes as-

(1) development of innovative curriculum or teaching methods, including interdisciplinary courses and courses for nonscience majors;

(2) purchase of educational equipment for use by students and faculty:

- (3) support for research and professional activities related to undergraduate education; and
  - (4) support of teaching fellows.

## (c) Criteria

Awards under this section shall be made on the basis of-

- (1) the commitment of the institution to improve undergraduate education in science, mathematics and engineering and to assign appropriate importance to undergraduate instruction in determining faculty compensation and as a criterion for faculty promotion;
- (2) the teaching ability and accomplishments of the faculty member applying for the award, including evidence that the applicant has remained current with research developments; and
- (3) the impact that the award will have on improving the quality of undergraduate instruction.

## (d) Designation

Institutions receiving grants under this section shall be designated "Centers of Excellence for Undergraduate Teaching".

(Pub. L. 101-589, title III, § 311, Nov. 16, 1990, 104 Stat. 2896.)

# SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 5431 of this

## SUBCHAPTER IV-WOMEN AND MINORI-TIES IN MATHEMATICS, SCIENCE AND ENGINEERING

# SUBCHAPTER REFERRED TO IN OTHER SECTIONS

This subchapter is referred to in section 5431 of this title.

## § 5361. Statement of purpose

It is the purpose of this subchapter to expand and enhance National Science Foundation program activities that are specifically focused on increasing the educational and professional participation of women and minorities in the fields of mathematics, science and engineering.

(Pub. L. 101-589, title IV, § 401, Nov. 16, 1990, 104 Stat. 2897.)

## § 5362. Distinguished Visiting Professors

The Director is authorized to make awards to institutions of higher education to enable such institutions to support distinguished women and minority faculty members in mathematics, science and engineering to enable such faculty members to serve as "Distinguished Visiting Professors" at academic institutions that do not have sufficient resources to attract and retain faculty members of such professional stature on a permanent basis.

(Pub. L. 101-589, title IV, § 402, Nov. 16, 1990, 104 Stat. 2897.)

## § 5363. Faculty awards for women and minorities

The Director is authorized to make awards to institutions of higher education, other than research universities, to enable such institutions to recruit and retain women and minority faculty members in the fields of mathematics, science and engineering, and to obtain equipment and facilities necessary for the research activities of such faculty members.

(Pub. L. 101-589, title IV, § 403, Nov. 16, 1990, 104 Stat. 2897.)

#### § 5364. Alliances for minority participation

## (a) In general

The Director is authorized to make awards to institutions of higher education to enable such institutions of higher education to establish or maintain alliances, partnerships, or other cooperative arrangements between institutions of higher education with predominately minority enrollments and institutions of higher education with high quality research programs in mathematics, science or engineering.

## (b) Special rule

In making awards pursuant to this subchapter, the Director shall, to the extent practicable, ensure—

- (1) an equitable geographic distribution of such awards; and
- (2) that institutions of higher education receiving such awards demonstrate experience in, and a commitment to, educating and graduating a significant number of women and minority students from programs in mathematics, science and engineering.

(Pub. L. 101-589, title IV, § 404, Nov. 16, 1990, 104 Stat. 2897.)

SUBCHAPTER V-EDUCATION COORDI-NATION AND DEPARTMENT OF **ENERGY PROGRAMS** 

#### § 5371. Science education report

#### (a) Report required

The Director of the Office of Science and Technology Policy, through the Federal Coordinating Council on Science, Engineering, and Technology, shall prepare a report on science, mathematics, and engineering education to be submitted to Congress within 1 year after November 16, 1990. The report shall include-

(1) a description of current Federal science, mathematics, and engineering education programs at all education leveis:

(2) any specific statutory changes necessary to further assist the agencies' mathematics and science education goals; and

- (3) a strategic plan for an interagency program to enhance science, mathematics, and engineering education, including-
  - (A) a statement of program goals;

(B) a description of implementation steps required to achieve such goals;

- (C) a strategy for taking advantage of the strengths of Federal research and development facilities related to science, mathematics, and engineering education;
- (D) provisions for outreach to teachers and others with direct access to students;

(E) a system for evaluating program effectiveness, including criteria for evaluation;

- (F) criteria and procedures to facilitate and expedite either the loan or transfer of title to surplus equipment to schools, school districts, and colleges and universities;
- (G) recommendations on how to enhance exchange of employees among agencies to share expertise in mathematics and science education; and
- (H) mechanisms to coordinate the activities of the agencies which will implement the plan.

## (b) Preparation and updating

Preparation of the plan required by subsection (a)(3) of this section shall, at a minimum, include representatives of the Departments of Energy and Education, and the National Science Foundation. In subsequent years, the plan required by subsection (a)(3) of this section shall be updated and submitted to Congress annually at the time of the President's budget request and shall include the funding levels in that budget for each agency to carry out each agency's portion of the plan.

(Pub. L. 101-589, title V, § 501, Nov. 16, 1990, 104 Stat. 2898.)

## SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 5372 of this title.

## § 5372. General education report

The Department of Defense, the Department of Energy, the Department of Agriculture, the Department of Labor, the Department of Health and Human Services, the Department of Transportation, the Department of Justice, the

National Aeronautics and Space Administration, the Environmental Protection Agency. and the Department of Commerce shall each prepare and submit to the Secretary of Education, within 9 months of November 16, 1990, a report on all educational activities supported, excluding activities described in section 5371 of this title. The Secretary shall compile this information and report to Congress within 1 year after November 16, 1990. The report shall include-

(1) a summary of current education programs at all levels; and

(2) any specific statutory changes necessary to further assist the agencies' education goals.

(Pub. L. 101-589, title V, § 502, Nov. 16, 1990, 104 Stat. 2898.)

# § 5373. Department of Energy programs

### (a) Authorization

## (1) In generai

The Secretary of Energy is authorized to-(A) provide paid administrative leave for employees of the Department of Energy or its research and development facilities who volunteer to interact with schools, colleges, universities, teachers, or students for the purpose of science, mathematics, and engi-

neering education;

(B) establish a volunteer talent pool of scientists, mathematicians, and engineers who have retired from the Department of Energy or its research and development facilities to-

- (i) serve as "Scientists in Residence" at schools and school districts for the purpose of assisting teachers with activities such as experiments, lectures, or materials:
- (ii) serve as requested, as a science counselor to students; and
- (iii) otherwise assist science, mathematics, and engineering classes;
- establish Americans'  $\mathbf{a}$ Young Summer Science Camp Program to provide secondary school students with a hands-on science experience as well as exposure to working scientists and career counseling; and
- (D) establish a program for mathematics and science teachers, to provide such teachers serving large numbers of disadvantaged students with new strategies for mathematics and science instruction.

## (2) Special rule

In carrying out the provisions of paragraph (1)(B) the Secretary of Energy, wherever possible acting through the Department's research and development facilities, shall identify and match schools and school districts with retired scientists, mathematicians, and engineers.

## (b) Facilities; non-Federal funds

Education activities assisted under this section may be conducted through Department of Energy research and development facilities.

The Secretary is authorized to accept non-Federal funds to finance education activities.

#### (c) Limitations

#### (1) National defense production activities

Nothing in this section shall apply to activities of the Department of Energy or its contractors that are funded as national defense production activities.

#### (2) Special ruie

Nothing in this section shall be construed to affect mathematics, science, and engineering education programs administered through the Department of Energy other than the Office of Energy Research.

#### (d) Termination provision

The provisions of this section shall not take effect if a substantially identical program is included in the National Defense Authorization Act for Fiscal Year 1991.

## (e) "Research and development facilities" defined

For the purpose of this section, the term "research and development facilities" means, except as provided in subsection (c)(1) of this section, all Department of Energy single purpose and multipurpose National Laboratories and research and development facilities and programs, and any other facility or program operated by a contractor funded from the Office of Energy Research.

(Pub. L. 101-589, title V, § 503, Nov. 16, 1990, 104 Stat. 2899.)

## TERMINATION OF SECTION

This section not effective pursuant to subsection (f) of this section, if the National Defense Authorization Act for Fiscal Year 1991 (see References in Text note below) included a substantially identical program. For substantially identical program, see section 7381 et seq. of Title 42, The Public Health and Welfare.

#### REFERENCES IN TEXT

The National Defense Authorization Act for Fiscal Year 1991, referred to in subsec. (d), is Pub. L. 101-510, Nov. 5, 1990, 104 Stat. 1485. For complete classification of this Act to the Code, see Tables.

## SUBCHAPTER VI—SCIENCE SCHOLARSHIPS

PART A-NATIONAL SCIENCE SCHOLARS PROGRAM

# § 5381. Purpose; appropriations authorized

#### (a) Purpose

It is the purpose of this part-

(1) to establish a National Science Scholars Program to recognize student excellence and achievement in the physical, life, and computer sciences, mathematics, and engineering;

(2) to provide financial assistance to students under paragraph (1) to continue their postsecondary education in such fields of study at sustained high levels of performance;

(3) to contribute to strengthening the leadership of the United States in such fields;

(4) to strengthen the United States mathematics, science, and engineering base by offer-

ing opportunities to pursue postsecondary education in life, physical, and computer sciences, mathematics, and engineering;

- (5) to encourage role models in scientific, mathematics, and engineering fields for young people;
- (6) to strengthen the United States mathematics, scientific, and engineering potential by encouraging equal participation of women with men in mathematics, scientific, and engineering fields; and
- (7) to attract talented students to teaching careers in mathematics and science in elementary and secondary schools.

#### (b) Authorization of appropriations

There are authorized to be appropriated to the Department of Education \$4,500,000 for fiscal year 1991, \$4,500,000 for fiscal year 1992 and \$10,000,000 for fiscal year 1993 for awards to National Science Scholars.

(Pub. L. 101-589, title VI, § 601, Nov. 16, 1990, 104 Stat. 2900; Pub. L. 102-103, title III, § 314(a), Aug. 17, 1991, 105 Stat. 508.)

#### AMENDMENTS

1991—Subsec. (b). Pub. L. 102-103, inserted ", \$4,500,000 for fiscal year 1992 and \$10,000,000 for fiscal year 1993" after "1991".

#### § 5382. Scholarships authorized

# (a) Program authority

The Secretary is authorized, in accordance with the provisions of this part, to carry out a program of awarding scholarships to students for the study of the physical, life, or computer sciences, mathematics, or engineering, who—

- (1) are selected by the President:
- (2) have demonstrated outstanding academic achievement in the physical, life, or computer sciences, mathematics, or engineering; and
- (3) show promise of continued outstanding academic performance in such field of study.

#### (b) Period of awards

#### (1) Period of initial award

A student who satisfies the requirements of section 5384(a) of this title may receive a scholarship, for a period of 1 academic year, for the first year of undergraduate study at an institution of higher education.

#### (2) Continuation awards

A student who satisfies the requirements of section 5384(b) of this title may receive additional scholarships, each awarded for a period of 1 academic year, in order to complete his or her undergraduate course of study. A student may receive additional scholarships for not more than 3 academic years of undergraduate study, except that, in the case of a student who is enrolled in an undergraduate course of study that requires attendance for 5 academic years, the student may receive additional scholarships for not more than 4 academic years of undergraduate study.

## (c) Use at any institution permitted

A student awarded a scholarship under this part may attend any institution of higher education, as defined in section 1141(a) of this title.

## (d) National Science Scholars

Students awarded scholarships under this part shall be known as "National Science Scholars".

(Pub. L. 101-589, title VI, § 602, Nov. 16, 1990, 104 Stat. 2900.)

#### SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in sections 5383, 5384 of this title.

## § 5383. Selection of scholars

#### (a) Selection criteria for initial awards

## (1) Selection criteria

The Director of the National Science Foundation shall develop and submit to the Secretary proposed criteria to be used in the selection of National Science Scholars for initial year awards under section 5382(b)(1) of this title. Such criteria shall provide for the selection of such scholars on the basis of potential to successfully complete a postsecondary program in the physical, life, or computer sciences, mathematics, or engineering, and on the basis of motivation to pursue a career in such fields. In addition, consideration may be given to the financial need of the individual, and to promoting participation by minorities and individuals with disabilities. The Director shall determine the proposed criteria for measuring the potential and motivation of nominees.

## (2) Publication

The Secretary and the Director shall agree to, and jointly publish in the Federal Register, appropriate selection criteria.

## (b) Selection process for initial awards

#### (1) Nominating committee

Each State desiring to qualify its students for selection as a National Science Scholar shall establish a nominating committee. Such committee shall be appointed by the chief State school officer or by an existing grant agency or panel designated by such officer, and shall be approved by the Secretary. The nominating committee shall be a broad-based committee composed of educators, scientists, mathematicians, and engineers, who shall serve as volunteers without compensation.

#### (2) Nominations

The nominating committee in each State shall submit to the President the nominations of at least four individuals from each congressional district in the State, at least half of whom are female. Such selections shall be ranked in order of priority.

#### (3) Selection

The President, after consultation with the Secretary and the Director of the National Science Foundation, shall select two National Science Scholars for each academic year from each congressional district, at least one of whom shall be female.

## (4) Announcement and award of scholarships

The selection process shall be completed, and the announcement of the selection of National Science Scholars shall be made by the President prior to January 1st of each fiscal year. The Secretary shall notify each Member of Congress of selections made from such Member's district and State before the public announcement by the President. Presentation of scholarships may be made in a public ceremony.

### (5) Congressional district

For purposes of this subsection, the term "congressional district" includes the part or all of a State (within the meaning of section 1141(b) of this titie) represented by a Member or Delegate of the House of Representatives, and includes the Commonwealth of the Northern Mariana Isiands.

#### (c) Continuation awards

The Secretary shall award additional scholarships under section 5382(b)(2) of this title to recipients of initial awards under section 5382(b)(1) of this title who the Secretary determines meet the requirements of section 5384(b) of this title.

# (d) Disbursal of scholarship proceeds

Scholarship proceeds shall be disbursed on behalf of students who receive scholarships under this part to the institutions of higher education at which the students are enrolled. No scholarship proceeds shall be disbursed on behalf of a student until the student is enrolled at an institution of higher education.

#### (e) Special rule

The Director and the Secretary shall encourage the support and assistance of civic groups, the business community, professional associations, institutions of higher education, and others in providing scholarship assistance to National Science Scholarship finalists.

(Pub. L. 101-589, title VI, § 603, Nov. 16, 1990, 104 Stat. 2901.)

#### SECTION REFERRED TO IN OTHER SECTIONS

This section is referred to in section 5384 of this title.

## § 5384. Eligibility of scholars

## (a) Requirements for initial award

To be eligible to receive a scholarship under section 5382(b)(1) of this title, a student shall—

- (1) be scheduled to graduate from a public or private secondary school, or to obtain the equivalent of a certificate of graduation (as recognized by the State in which the student resides), during the school year in which the award is made;
- (2) be a citizen or national of the United States or the entities set forth in section 5383(b)(5) of this title, or be an alien lawfully admitted to the United States for permanent residence:
- (3) have demonstrated outstanding academic achievement in secondary school in physi-

cal, life, or computer sciences, mathematics, or engineering;

- (4) have been accepted for enrollment at an institution of higher education as a full-time undergraduate student (as determined by the institution); and
- (5) have declared a major in 1 of the physical, life, or computer sciences, mathematics, or engineering, or provided a written statement to the State of his or her intent to major in 1 of these fields of study, if it is the policy of the institution at which the student has been accepted for enrollment that students not declare a major until a later point in their course of study.

## (h) Requirements for continuation awards

A student who has received a scholarship under section 5382(b)(1) of this title may receive a scholarship for a subsequent academic year of undergraduate education under section 5382(b)(2) of this title if the student—

- (1) maintains a high level of academic achievement, as determined in accordance with the regulations of the Secretary;
- (2) continues to major in, or provides a statement to the State as described in subsection (a)(5) of this section of his or her continuing intent to major in, one of the physical, life, or computer sciences, mathematics, or engineering; and
- (3) continues to be enrolled at an institution of higher education as a full-time undergraduate student (as determined by the institution).

## (c) Waiver of full-time attendance requirement

The Secretary may waive the full-time attendance requirements in this section in unusual circumstances.

## (d) Failure to meet eligibility requirements

In the event that the student fails to meet the requirements of this section, the student's eligibility to receive further scholarships (or scholarship proceeds) under this part shall be suspended in accordance with the regulations of the Secretary.

# (e) Reinstatement of eligibility

The Secretary shall determine circumstances under which eligibility of a scholarship recipient under this part may be reinstated if the recipient seeks to re-enter school after an interruption of schooling for personal reasons, including, but not limited to, pregnancy, childrearing, and other family responsibilities.

#### (f) Notification of secondary schools

The Secretary shall notify all public and private secondary schools and all institutions of higher education in each State annually of the availability of scholarships under this part.

(Pub. L. 101-589, title VI, § 604, Nov. 16, 1990, 104 Stat. 2902.)

# Section Referred to in Other Sections

This section is referred to in sections 5382, 5383 of this title.

## § 5385. Scholarship amount

#### (a) Amount of award

Except as provided in subsections (b) and (c) of this section, the amount of a scholarship awarded under this part for any academic year shall be \$5.000.

## (h) Relation to cost of attendance

Notwithstanding subsection (a) of this section, the amount of a scholarship awarded under this part shall be reduced by the amount that the scholarship exceeds the student's cost of attendance, as defined in section 1087ll of this title. A scholarship awarded under this part shall not be reduced on the basis of the student's receipt of other forms of Federal student financial assistance, but shall be taken into account in determining the eligibility of the student for those other forms of Federal student financial assistance.

## (c) Adjustments for insufficient appropriations

In the event that funds available in a fiscal year are insufficient to fully fund all awards under this part, the amount paid to each student shall be reduced proportionately.

(Pub. L. 101-589, title VI, § 605, Nov. 16, 1990, 104 Stat. 2903.)

# \$ 5386. Summer employment opportunities for scholars

## (a) Priority for summer employment

To the extent that they are otherwise qualified, students receiving scholarships under this part shall be given priority consideration for federally financed summer employment in federally funded research and development centers, that, to the maximum extent practicable, complements and reinforces the educational program of these students.

#### (h) Federal agency cooperation

Federal agencies shall cooperate fully with the Secretary and participate actively in providing appropriate summer employment opportunities for such students.

(Pub. L. 101-589, title VI, § 606, Nov. 16, 1990, 104 Stat. 2903.)

## PART B-ROBERT NOYCE SCHOLARSHIPS

## § 5401. Robert Noyce Scholarships

#### (a) Program authorized

There is established a scholarship program for students in a baccalaureate degree program in physical, life, or computer sciences, mathematics, or engineering who are willing to commit themselves to teaching elementary or secondary school mathematics or science.

## (h) Period of awards

## (1) Period of initial award

A student who satisfies the requirements of subsection (g)(1) of this section may receive a scholarship, for a period of 1 academic year of undergraduate study at an institution of higher education.

## (2) Continuation awards

## (A) First continuation award

A student who satisfies the requirements of subsection (g)(2) of this section may receive an additional scholarship, awarded for a period of 1 academic year, in order to complete his or her undergraduate course of study.

#### (B) Second continuation award

An additional period of scholarship support, not to exceed 1 year, shall be available to recipients of scholarships under subsection (a) of this section who have completed requirements for the baccalaureate degree but require additional education courses in order to obtain certification to teach.

#### (c) Use at any institution permitted

A student awarded a scholarship under this section may attend any institution of higher education.

#### (d) Designation

The individuals awarded scholarships under subsection (a) of this section shall be referred to as the "Robert Noyce Mathematics and Science Teacher Corps".

#### (e) Selection

## (1) Selection process for initial awards

#### (A) Selection criteria

The Director shall develop and submit to the Secretary proposed application procedures and criteria to be used in the selection of nominees under this section. Such criteria shall provide for the selection of such nominees on the basis of academic merit and demonstrated accomplishment in physical, life, or computer science, mathematics, or engineering, and on the basis of motivation to pursue a career in science, inathematics, or engineering. In addition, consideration may be given to the financial need of the individual, and to promoting participation by minorities and individuals with disabilities.

#### (B) Publication

The Secretary and the Director shall agree to, and jointly publish in the Federal Register, appropriate selection criteria.

## (C) Merit review panel

Award recipients shall be nominated from among applicants by a merit review panel composed of 8 individuals, 4 of whom shall be appointed by the Director and 4 of whom shall be appointed by the Secretary. Members of the panel shall not be employees of the United States and shall serve as volunteers without compensation. Nominees shall be selected on the basis of selection criteria, which shall be developed and published in accordance with subparagraphs (A) and (B). The panel shall rank the nominees in order of priority.

# (D) Awarding of scholarships

The panel shall submit its nominees to the President, who shall, after consultation with the Director and the Secretary, award not more than 500 scholarships under subsection (a) of this section.

## (2) Continuation awards

The Secretary shall award additional scholarships to recipients of initial awards under this section who the Secretary determines meet the requirements of subsection (g)(2) or (b)(2)(B) of this section.

## (f) Disbursal of scholarship proceeds

Scholarship proceeds shall be disbursed on behalf of students who receive scholarships under this section to the institutions of higher education at which the students are enrolled. No scholarship proceeds shall be disbursed on behalf of a student unless the student is enrolled at an institution of higher education.

#### (g) Eligibility

## (1) Initial eligibility

Only individuals who are-

- (A) citizens or nationals of the United States, or who are aliens lawfully admitted to the United States for permanent residence:
- (B) majoring in the physical, life, or computer sciences, mathematics, or engineering;
- (C) in the last 2 years of a baccalaureate degree program; and
- (D) enrolled in an institution of higher education as a full-time undergraduate student (as determined by the institution of higher education),

shall be eligible for awards under this section.

## (2) Requirements for first continuation awards

A student who has received a scholarship under this section may receive a first continuation award under subsection (b)(2)(A) of this section for a subsequent academic year of undergraduate education if the student—

- (A) maintains a high level of academic achievement, as determined in accordance with the regulations of the Secretary;
- (B) continues to major in one of the physical, life, or computer sciences, mathematics, or engineering; and
- (C) continues to be enrolled at an institution of higher education as a full-time undergraduate student (as determined by the institution).

# (b) Waiver of full-time attendance requirement

The Secretary may waive the full-time attendance requirements in this section in unusual circumstances.

### (i) Failure to meet eligibility requirements

In the event that the student fails to meet the requirements of this section, the student's eligibility to receive further scholarships (or scholarship proceeds) under this section shall be suspended in accordance with the regulations of the Secretary.

## (j) Reinstatement of eligibility

The Secretary shall determine circumstances under which eligibility of a scholarship recipient under this section could be reinstated if the recipient seeks to re-enter school after an interruption of schooling for personal reasons, including, but not limited to, pregnancy, childrearing, and other family responsibilities.

#### (k) Notification of schools

The Secretary shall notify all institutions of higher education in the United States annually of the availability of scholarships under this section.

## (1) Scholarship amount

#### (1) Amount of award

Except as provided in paragraph (2), the amount of a scholarship awarded under this section for any academic year shall be \$5,000.

#### (2) Relation to cost of attendance

Notwithstanding paragraph (1), the amount of a scholarship awarded under this section shall be reduced by the amount that the scholarship exceeds the student's cost of attendance, as defined in section 472 of the Higher Education Act of 1965 [20 U.S.C. 108711]. A scholarship awarded under this section shall not be reduced on the basis of the student's receipt of other forms of Federal student financial assistance, but shall be taken into account in determining the eligibility of the student for those other forms of Federal student financial assistance.

#### (m) Service requirement

#### (1) Teaching ohligation

Each recipient of an award under this section shall, as a condition of the receipt of such award, agree to complete, within 6 years after graduation from the baccalaureate degree program for which the award was made or within 6 years after completion of the additional period of scholarship support, if applicable, at least 2 years of service as an elementary or secondary mathematics or science teacher for each year of scholarship support under this section, except that such requirement shall not exceed a total of 4 years. Service required under this paragraph shall be performed at a school receiving assistance under chapter 1 of title I of the Elementary and Secondary Education Act of 1965 (20. U.S.C. 2701 et seq.).

## (2) Repayment alternative

As part of the agreement required under paragraph (1), each recipient shall agree, in the event of failure to complete the service obligation described in paragraph (1), to repay an amount equal to—

(A) the total amount of awards received by such individual under this section; plus

(B) the interest on such amounts which would be payable if at the time the amounts were received they were loans bearing interest at the maximum legal prevailing rate, as determined by the Treasurer of the United States,

except that such payment shall be reduced, for each year of service that the individual has successfully completed, by a fraction equal to 1 divided by the number of years of service the student is obligated to perform Such repayment shall be made within 1 year after the recipient has ceased to perform the service obligation described in paragraph (1).

#### (3) Exceptions

The Secretary may provide for the partial or total waiver or suspension of any service obligation or payment by an individual under this section in the same manner as is permitted under section 558 of the Higher Education Act of 1965 [20 U.S.C. 1111g] with respect to scholarships under subpart 1 of part D of title V of the Higher Education Act of 1965 [20 U.S.C. 1111 et seq.], except that pregnancy, child-rearing, or comparable family responsibilities shall also be grounds for deferral.

# (n) Authorization of appropriations

There are authorized to be appropriated to the National Science Foundation, for transfer to the Department of Education, \$2,500,000 for fiscal year 1991, \$5,000,000 for fiscal year 1992, and \$7,500,000 for fiscal year 1993, to carry out the provisions of this part.

(Pub. L. 101-589, title VI, § 611, Nov. 16, 1990, 104 Stat. 2904.)

#### REFERENCES IN TEXT

The Elementary and Secondary Education Act of 1965, referred to in subsec. (m)(1), is Pub. L. 89-10, Apr. 11, 1965, 79 Stat. 27, as amended generally by Pub. L. 100-297, Apr. 28, 1988, 102 Stat. 140. Chapter 1 of title 1 of the Act is classified generally to division 1 (§ 2701 et seq.) of subchapter I of chapter 47 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 2701 of this title and Tables.

The Higher Education Act of 1965, referred to in subsec. (m)(3), is Pub. L. 89-329, Nov. 8, 1965, 79 Stat. 1219, as amended. Subpart 1 of part D of title V of the Act is classified generally to subpart 1 (§ 1111 et seq.) of part D of subchapter V of chapter 28 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 1001 of this title and Tables.

# PART C-NATIONAL ACADEMY OF SCIENCE, SPACE, AND TECHNOLOGY

# § 5411. National Academy of Science, Space, and Technology

## (a) Establishment of Academy

The Secretary shall establish a National Academy of Science, Space, and Technology for the instruction and preparation of selected individuals for service in a science, mathematics, or engineering related capacity in the employ of the United States or a United States corporation.

## (b) Advisory Board

## (1) Memhership

The Secretary, after consultation with the Director, shall appoint an Advisory Board for the Academy consisting of a broadly representative group of scientists, engineers, educators, and businessmen representing high-technology industries.

## (2) Functions

## The Advisory Board shall-

(A) develop criteria to be used in the selection of recipients of scholarships under this section; (B) select scholarship recipients from among nominations received under subsection (e) of this section; and

(C) identify fields of science, mathematics, and engineering which will be given priority in awarding scholarships under this section.

In making determinations under subparagraph (C), the Advisory Board shall take into consideration requirements of Government and industry for technical personnel in fields of science, mathematics, and engineering which are relevant to emerging industrial technologies of significant economic importance and in which shortages in the work force of the United States are projected.

## (c) Scholarships authorized

- (1) The Academy shall establish a scholarship program for students to pursue the baccalaureate degree in fields of science, mathematics, or engineering who are willing to commit themselves to service described in subsection (n) of this section.
- (2) A student who satisfies the requirements of subsection (h)(1) of this section may receive a scholarship for a period of 1 academic year of undergraduate study at a Member Institute.
- (3) A student who satisfies the requirements of subsection (h)(2) of this section may receive additional scholarships, each awarded for a period of 1 academic year, in order to complete his or her undergraduate course of study to a maximum of 3 awards.
- (4) The individuals awarded scholarships under this section shall be referred to as the "Science, Space, and Technology Corps".
- (5) An individual awarded a scholarship under this section may attend any institution of higher education that offers the baccalaureate degree in science, mathematics, or engineering. Such institutions shall be designated as Member Institutes of the Academy.

# (d) Nominations for scholarship awards

Members and Delegates of the House of Representatives may each nominate 6 or more individuals, at least half of whom are female, for scholarships.

## (e) Sclection for initial awards

- (1) The Board shall develop criteria for selection of nominees under this section. Such criteria shall provide for the selection of such nominees on the basis of academic merit and motivation to pursue a career in science, mathematics, or engineering. In addition, consideration may be given to the financial need of the individual, and to promoting participation by minorities and individuals with disabilities.
- (2) From among nominees received pursuant to subsection (d) of this section, the Board shall select for award of a scholarship one individual from each Congressional District.

## (f) Continuation awards

The Secretary shall award additional scholarships to recipients of initial awards under this section who the Secretary determines meet the requirements of subsection (h)(2) of this section.

# (g) Disbursal of scholarship proceeds

Scholarship proceeds shall be disbursed on behalf of students who receive scholarships under this section to the institutions of higher education at which the students are enrolled. No scholarship proceeds shall be disbursed on behalf of a student unless the student is enrolled at an institution of higher education.

## (b) Eligibility

## (1) Initial eligibility

Only individuals who are-

- (A) citizens or nationals of the United States, or who are aliens lawfully admitted to the United States for permanent residence:
- (B) majoring in the physical, life, or computer sciences, mathematics, or engineering; and
- (C) enrolled in an institution of higher education as a full-time undergraduate student (as determined by the institution of higher education),

shall be eligible for awards under this section.

## (2) Requirements for continuation awards

A student who has received a scholarship under this section may receive a continuation award under subsection (f) of this section for a subsequent academic year of undergraduate education if the student—

- (A) maintains a high level of academic achievement, as determined in accordance with the regulations of the Secretary;
- (B) continues to major in one of the physical, life, or computer sciences, mathematics, or engineering; and
- (C) continues to be enrolled at an institution of higher education as a full-time undergraduate student (as determined by the institution).

# (i) Waiver of full-time attendance requirement

The Secretary may waive the full-time attendance requirements in this section in unusual circumstances.

## (j) Failure to meet eligibility requirements

In the event that the student fails to meet the requirements of this section, the student's eligibility to receive further scholarships (or scholarship proceeds) under this section shall be suspended in accordance with the regulations of the Secretary.

## (k) Reinstatement of eligibility

The Secretary shall determine circumstances under which eligibility of a scholarship recipient under this section may be reinstated if the recipient seeks to re-enter school after an interruption of schooling for personal reasons, including, but not limited to, pregnancy, childrearing, and other family responsibilities.

# (1) Notification of schools

The Secretary shall notify all institutions of higher education in the United States annually of the availability of scholarships under this section.

§ 5421

## (m) Scholarship amount

## (1) Amount of award

Except as provided in paragraphs (2) and (3), the amount of a scholarship awarded under this section for any academic year shall be \$5,000.

#### (2) Relation to cost of attendance

Notwithstanding paragraph (1), the amount of a scholarship awarded under this section shall be reduced by the amount that the scholarship exceeds the student's cost of attendance, as defined in section 472 of the Higher Education Act of 1965 [20 U.S.C. 108711]. A scholarship awarded under this section shall not be reduced on the basis of the student's receipt of other forms of Federal student financial assistance, but shall be taken into account in determining the eligibility of the student for those other forms of Federal student financial assistance.

#### (3) Adjustments for insufficient appropriations

In the event that funds available in a fiscal year are insufficient to fully fund all awards under this section, the amount paid to each student shall be reduced proportionately.

## (n) Service requirement

## (1) Science, space, and technology scholarships

Each recipient of an award under this section shall, as a condition of the receipt of such award, agree to complete four years of—

- (A) service in a physical, life, or computer science, mathematics, or engineering related capacity in the employ of the United States or any corporation or other entity, organized under the laws of the United States or of a State of the United States, at least 50 percent of which is owned by United States nationals, and which is engaged in scientific or engineering research or endeavor:
- (B) postgraduate education in physical, life, or computer science, mathematics, or engineering at an institution of higher education; or
- (C) a combination of service and education described under subparagraphs (A) and (B).

#### (2) Repayment obligation

As part of the agreement required under paragraph (1), each recipient shall agree, in the event of failure to complete the service obligation described in paragraph (1), to repay an amount equal to—

(A) the total amount of awards received by such individual under this section; plus

(B) the interest on such amounts which would be payable if at the time the amounts were received the amounts were loans bearing interest at the maximum legal prevailing rate, as determined by the Treasurer of the United States.

Such repayment shall be made within 1 year after the recipient has ceased to perform the service obligation described in paragraph (1).

## (3) Exceptions

The Secretary may provide for the partial or total waiver or suspension of any service

obligation or payment by an individual under this section in the same manner as is permitted under section 558 of the Higher Education Act of 1965 [20 U.S.C. 1111g] with respect to scholarships under subpart 1 of part D of title V of the Higher Education Act of 1965 [20 U.S.C. 1111 et seq.], except that pregnancy, child-rearing, or comparable family responsibilities shall also be grounds for deferral.

#### (0) Authorization of appropriations

There are authorized to be appropriated to carry out this section \$2,200,000 for each of the fiscal years 1992 and 1993.

(Pub. L. 101-589, title VI, § 621, Nov. 16, 1990, 104 Stat. 2907; Pub. L. 102-103, title III, § 314(b), Aug. 17, 1991, 105 Stat. 508.)

#### REFERENCES IN TEXT

The Higher Education Act of 1965, referred to in subsec. (n)(3), is Pub. L. 89-329, Nov. 8, 1965, 79 Stat. 1219, as amended. Subpart 1 of part D of title V of the Act is classified generally to subpart 1 (§ 1111 et seq.) of part D of subchapter V of chapter 28 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 1001 of this title and Tables.

#### AMENDMENTS

1991—Subsec. (o). Pub. L. 102-103 substituted "each of the fiscal years 1992 and 1993" for "fiscal year 1991".

#### TERMINATION OF ADVISORY BOARDS

Advisory boards established after Jan. 5, 1973, to terminate not later than the expiration of the 2-year period beginning on the date of their establishment, unless, in the case of a board established by the President or an officer of the Federal Government, such board is renewed by appropriate action prior to the expiration of such 2-year period, or in the case of a board established by the Congress, its duration is otherwise provided for by law. See sections 3(2) and 14 of Pub. L. 92-463, Oct. 6, 1972, 86 Stat. 770, 776, set out in the Appendix to Title 5, Government Organization and Employees.

## PART D-ADDITIONAL PROVISIONS

# \$ 5421. Effect of certain controlled substance and felony convictions

#### (a) General rule

Except as provided in subsection (b) of this section, or by a court under the authority of section 5301 1 of the Anti-Drug Abuse Act of 1988 (102 Stat. 4310), if any person is convicted under Federal or State law of the illegal use. possession, or distribution of a controlled substance (as such term is defined in the Controlled Substances Act [21 U.S.C. 801 et seq.]), or of any crime which is a felony under Federal law or for an act which, if committed in a Federal jurisdiction, would be a felony under Federal law, and such crime was committed during a period in which such person received an award under this subchapter, such person shall not be eligible to receive any further such awards, and shall be liable to the United States for the repayment, within 1 year after such

<sup>&</sup>lt;sup>1</sup> See References in Text note below.

conviction, of all amounts received pursuant to such awards, plus the interest on such amounts which would be payable if at the time the amounts were received they were loans bearing interest at the maximum legal prevailing rate, as of the time of such conviction, as determined by the Treasurer of the United States.

#### (b) Exemption

A person subject to the provisions of subsection (a) of this section may be exempted from

those provisions in whole or in part if-

(1) that person, within 90 days of a conviction described in subsection (a) of this section, petitions the Secretary of Education for a good cause exemption from subsection (a) of this section; and

(2) the Secretary of Education approves the

petition.

(Pub. L. 101-589, title VI, § 631, Nov. 16, 1990, 104 Stat. 2910.)

#### REFERENCES IN TEXT

Section 5301 of the Anti-Drug Abuse Act of 1988, referred to in subsec. (a), means section 5301 of Pub. L. 100-690, which was classified to section 853a of Title 21, Food and Drugs, and was renumbered section 421 of title II of Pub. L. 91-513 by Pub. L. 101-647, title X, § 1002(d)(1), Nov. 29, 1990, 104 Stat. 4827, and transferred to section 862 of Title 21.

The Controlled Substances Act, referred to in subsec. (a), is title II of Pub. L. 91-513, Oct. 27, 1970, 84 Stat. 1242, as amended, which is classified principally to subchapter I (§ 801 et seq.) of chapter 13 of Title 21. For complete classification of this Act to the Code, see Short Title note set out under section 801 of Title

21 and Tables.

## § 5422. Report

The National Science Foundation shall prepare and submit to the Congress no later than 1 year after November 16, 1990, a report examining current efforts to improve the quality of elementary and secondary mathematics and science education and career potential for the underprivileged through joint efforts of business, school districts, and institutions of higher education, and recommending ways the Federal Government may encourage such efforts. The report shall include, to the extent possible, a comprehensive list of existing efforts, an assessment of what factors have made some such efforts more successful than others, and a review of the extent to which such efforts have drawn on Federal programs.

(Pub. L. 101-589, title VI, § 632, Nov. 16, 1990, 104 Stat. 2910.)

SUBCHAPTER VII—GENERAL PROVISIONS AND AUTHORIZATION OF APPROPRIATIONS

PART A-AUTHORIZATION OF APPROPRIATIONS

# § 5431. Authorization of appropriations

From the amounts authorized to be appropriated to the National Science Foundation pursuant to the National Science Foundation Authorization Act of 1988, there are authorized to be appropriated—

(1) in addition to any amount obligated in fiscal year 1990 for programs on applications

of advanced technology within the Education and Human Resources Directorate—

- (A) \$10,000,000 for fiscal year 1991 to carry out the provisions of section 5311 of this title, of which \$5,000,000 shall be available to carry out the provisions of subsection (a) of such section and \$5,000,000 shall be available to carry out the provisions of subsection (b) of such section;
- (B) \$11,000,000 for fiscal year 1992 to carry out the provisions of section 5311 of this title, of which \$5,500,000 shail be available to carry out the provisions of subsection (a) of such section and \$5,500,000 shall be available to carry out the provisions of subsection (b) of such section; and
- (C) \$12,500,000 for fiscal year 1993 to carry out the provisions of section 5311 of this title, of which \$6,250,000 shall be available to carry out the provisions of subsection (a) of such section and \$6,250,000 shall be available to carry out the provisions of subsection (b) of such section;
- (2) in addition to any amounts obligated in fiscal year 1990 for informal science education programs, \$15,000,000 for fiscal year 1991, \$17,000,000 for fiscal year 1992, and \$19,400,000 for fiscal year 1993 to carry out the provisions of section 5321 of this title;
- (3) in addition to any amounts obligated in fiscal year 1990 for statewide education programs, \$17,000,000 for fiscal year 1991, \$19,400,000 for fiscal year 1992, and \$22,100,000 for fiscal year 1993 to carry out the provisions of section 5331 of this title;
- (4) in addition to any amounts obligated in fiscal year 1990 for undergraduate education programs, \$16,000,000 for fiscal year 1991, \$18,200,000 for fiscal year 1992, and \$20,700,000 for fiscal year 1993 to carry out the provisions of section 5351 of this title;
- (5) \$37,900,000 for fiscal year 1991, \$60,600,000 for fiscal year 1992, and \$67,800,000 for fiscal year 1993 to support of graduate fellowships, including expansion of the number of graduate fellowships pursuant to the provisions of section 5342 of this title:
- (6) \$10,000,000 for fiscal year 1991, \$20,000,000 for fiscal year 1992, and \$30,000,000 for fiscal year 1993 to carry out the provisions of section 5343 of this title; and
- (7) in addition to any amounts obligated in fiscal year 1990 for programs to increase participation by women and minorities in careers in science, mathematics and engineering, \$17,000,000 for fiscal year 1991, \$19,400,000 for fiscal year 1992, and \$22,000,000 for fiscal year 1993 to carry out the provisions of subchapter IV of this chapter.

(Pub. L. 101-589, title VII, § 701, Nov. 16, 1990, 104 Stat. 2910.)

## REFERENCES IN TEXT

The National Science Foundation Authorization Act of 1988, referred to in text, is Pub. L. 100-570, Oct. 31, 1988, 102 Stat. 2865. For complete classification of this Act to the Code, see Short Title of 1988 Amendments note set out under section 1861 of Title 42, The Public Health and Welfare, and Tables.

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#### PART B-DEFINITIONS

#### § 5441. Definitions

As used in this chapter-

- (1) the term "consortium", refers to a combination of school districts, colleges, universities, other formal or informal educational entities, State and local governments, professional organizations, community groups, businesses and industries, or any combination thereof:
- (2) the term "Director", unless otherwise specified, shall refer to the Director of the National Science Foundation:
- (3) the term "elementary school" has the same meaning given that term in section 2891(8) of this title;
- (4) the term "Foundation" refers to the National Science Foundation;
- (5) the term "institution of higher education" has the same meaning given that term in section 1141(a) of this title;
- (6) the term "local educational agency" has the same meaning given that term in section 2891(12) of this title:
- (7) the term "minorities" refers to members of those racial and ethnic groups underrepresented in mathematics, science and engineering, including American Indlans, Black Americans, Hispanic Americans, Native Alaskans, or Native Pacific Islanders;
- (8) the terms "scholarship" and "fellowship" refers to a financial award made to a student which enables a student to pursue a desired course of study at an institution of higher education;
- (9) the term "secondary school" has the same meaning given that term in section 2891(21) of this title;
- (10) the term "Secretary", unless otherwise specified, refers to the Secretary of the Department of Education;
- (11) the term "State educational agency" has the same meaning given that term in section 2891(23) of this title; and
- (12) the term "traineeship" means a form of financial support provided to an institution of higher education to—
  - (A) be used to provide stipends to graduate students selected by such institution; and
  - (B) help defray educational costs of educating such graduate students.

(Pub. L. 101-589, title VII, § 711, Nov. 16, 1990, 104 Stat. 2911.)

## REFERENCES IN TEXT

This chapter, referred to in text, was in the original "this Act", meaning Pub. L. 101-589, Nov. 16, 1990, 104 Stat. 2881, known as the Excellence in Mathematics, Science and Engineering Education Act of 1990, which enacted this chapter and sections 2994 to 2994g of this title, redesignated section 2993 of this title as section 2996 of this title, amended sections 237, 240, 1201a, 1221e-1, 2983 to 2992, and 4512 of this title and sections 1869 and 1873 of Title 42, The Public Health and Welfare, and enacted provisions set out as notes under sections 240, 2982, and 5301 of this title. For complete classification of this Act to the Code, see Short Title note set out under section 5301 of this title and Tables.

# CHAPTER 65—NATIONAL ENVIRONMENTAL EDUCATION

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